

Department of Energy

Ohio Field Office Fernald Area Office

P. O. Box 538705 Cincinnati, Ohio 45253-8705. (513) 648-3155



JUN 2 2 2000

Mr. James A. Saric, Remedial Project Manager U.S. Environmental Protection Agency Region V-SRF-5J 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager Ohio Environmental Protection Agency 401 East 5th Street Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

PERMIT INFORMATION SUMMARY FOR DEPLETED URANIUM METAL CORE REPACKAGING

This notification is being provided to inform your office that the Department of Energy (DOE) is planning to repackage boxes of depleted uranium metal cores into steel shipping containers (also known as Thorium Overpack Containers or TOC) for eventual off-site shipment and storage. The purpose of the repackaging is part of the remedial action to clean up the site. Core inspection and box repackaging will take place in Building 80, which is located in the southwest quadrant of the Fernald Environmental Management Project's (FEMP) former processing facility. Inspection of the cores will take place in High-Efficiency Particulate Air (HEPA) ventilated inspection booth that will exhaust to a stack. The stack is 20 feet high by 12-inch diameter. The stack flow rate will be 2000 acfm. Movement of the boxes of cores will take place entirely inside Building 80 and be controlled using portable HEPA ventilation. The portable HEPA ventilation will exhaust inside the building and building airborne contamination levels will be measured.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121(e)(1) states that no federal, state, and local permit shall be required for the portion of any removal or remedial action conducted entirely on-site, where such remedial action is selected and carried out in compliance with Section 121. Repackaging of the boxes of cores into the TOC is being completed in support of the remedial action to clean up the FEMP and will be carried out in compliance with Section 121. Therefore, this

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project is not required to obtain any federal, state, or local permits. The project must, however, be conducted in accordance with the terms and conditions of those permits that otherwise would be required.

Section XIII.B of the Amended Consent Agreement requires the DOE to identify those permits that otherwise would be required along with the standards, requirements, criteria, or limitations that would have to be met in order to obtain each permit. The DOE must report these findings to the U.S. Environmental Protection Agency (U.S. EPA) along with an explanation of how the response action will meet these standards, requirements, criteria, or limitations. The enclosed <u>Permit Information Summary</u> identifies permits and associated requirements that are applicable to the repackaged project.

If you have any questions or require additional information, please contact Randy Janke at (513) 648-3123.

Sincerely,

FEMP:Nickel

Johnny W. Reising Fernald Remediation Action Project Manager

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Enclosure

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cc w/enclosure:

Mr. Tom Schneider

R. C. Janke, OH/FEMP

R. J. Janke, OH/FEMP

K. Nickel, OH/FEMP

G. Jablonowski, USEPA-V, SRF-5J

T. Schneider, OEPA-Dayton (three copies of enclosure)

F. Bell, ATSDR

M. Schupe, HSI GeoTrans

R. Vandegrift, ODH

F. Hodge, Tetra Tech

AR Coordinator, Fluor Fernald, Inc./78

cc w/o enclosure:

N. Hallein, EM-31/CLOV

A. Tanner, OH/FEMP

D. Carr, Fluor Fernald, Inc./2

T. Hagen, Fluor Fernald, Inc./65-2

J. Harmon, Fluor Fernald, Inc./90

S. Hinnefeld, Fluor Fernald, Inc./31

M. Jewett, Fluor Fernald, Inc./52-2

U.Kumthekar, Fluor Fernald, Inc./65

R. Palmer, Fluor Fernald, Inc./65-2

B. Russell, Fluor Fernald, Inc./50

P. Spotts, Fluor Fernald, Inc./65-2

T. Walsh, Fluor Fernald, Inc./65-2

ECDC, Fluor Fernald, Inc./52-7

PROJECT: DEPLETED URANIUM METAL CORE REPACKAGING AT BUILDING 80

AIR PERMITS

The repackaging of depleted uranium metal cores at Building 80 could result in the generation of fugitive and point source particulate radionuclide emissions. The particulate radionuclide emissions that could be released from the inspection booth exhaust stack and unloading of the sealand containers are estimated to be minimal. Therefore, the use of HEPA filters to control these emissions meets or exceeds the best available technology (BAT) requirements for this activity.

A- Identification of Air Permits that Would Otherwise be Required

State Permits

PERMIT TO INSTALL - OAC 3745-31-02 (A): Unless exempted by OAC 3745-31-03, no person shall cause, permit or allow the installation of a new source of air pollutants or cause, permit or allow the modification of an air contaminant source without first obtaining a Permit To Install. Under ordinary circumstances, an air Permit To Install would have to be obtained for the Inspection Booth.

PERMIT TO OPERATE - OAC 3745-35-02 (A): Except as otherwise provided in Paragraph H (Conditional Permits To Operate) of rule OAC 3745-35-02 and in OAC rules 3745-35-03 (variances) and 3745-35-05 (Permit exemptions and registration status), no person may cause, permit or allow the operation or other use of any air contaminant source without first applying for and obtaining a Permit To Operate. Under ordinary circumstances, a Permit To Operate would have to be obtained for the Inspection Booth.

Federal Permits

40 CFR PART 61, SUBPART H - NATIONAL EMISSION STANDARDS FOR EMISSIONS OF RADIONUCLIDES OTHER THAN RADON FROM DOE FACILITIES - Section 61.96(b) states that an application for approval does not have to be filed for radionuclide sources if the effective dose equivalent caused by all emissions from the new construction or modification is less than 0.1 mrem per year. Emissions from the Inspection Booth and from moving the cores from the sealands to the booth have been determined to result in a dose less than 0.1 mrem per year, therefore, an application for approval does not have to be filed.

B- Identification of Standards, Requirements, Criteria, or Limitations

The following would have to be met to obtain the above Permits/Notifications:

State Requirements

PERMITS TO INSTALL - OAC 3745-31-05 (A): The repackaging of the depleted uranium metal cores must not prevent or interfere with the attainment or maintenance of applicable ambient air quality

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B- <u>Identification of Standards, Requirements, Criteria, or Limitations</u>

The following would have to be met to obtain the above Permits/Notifications:

State Requirements

PERMITS TO INSTALL - OAC 3745-31-05 (A): The repackaging of the depleted uranium metal cores must not prevent or interfere with the attainment or maintenance of applicable ambient air quality

standards; and, must not result in violation of any applicable laws; and, must employ the best available technology to control emissions.

PERMITS TO OPERATE - OAC 3745-35-02 (C): The repackaging of the depleted uranium metal cores must be performed in compliance with the applicable air pollution control law; must be constructed, located, or installed in compliance with the Terms and Conditions of a Permit To Install; and must not violate National Emission Standards for Hazardous Air Pollutants adopted by the Administrator of the EPA.

Federal Requirements

NESHAP SUBPART H - 40 CFR PART 61, SECTION 61.92: Emissions of radionuclides (except radon²²² and radon²²⁰) to the ambient air from Department of Energy facilities shall not exceed those amounts that would cause any member of the public to receive in any year an effective dose equivalent (EDE) of 10 mrem per year.

C- Explanation of How the Response Action Will Meet the Standards, Requirements, Criteria, or Limitations Identified Above

The repackaging of the depleted uranium metal cores will not interfere with the attainment or maintenance of any applicable air quality standards; nor will it result in a violation of any applicable laws. The repackaging has two possible sources for emitting radionuclides: the Inspection Booth which exhausts to a stack and the movement of the core boxes inside the building. Emissions from both have been estimated to be minimal. Emissions from the Inspection Booth will be controlled using HEPA filters. This meets (or exceeds) BAT for this activity. Fugitive emissions from the movement of the core boxes will be controlled using portable HEPA filtration and by sealing the opening of the sealand to the building. This meets (or exceeds) BAT for this activity. Because emissions are minimal (potential EDE < 10⁻³ mrem per year) continuous or periodic monitoring of the emissions is not required.

WATER PERMITS

The repackaging of the depleted uranium metal cores should not generate any wastewater. Since no wastewater is planned to be produced, then no State or Federal water permits, standards, or limitations are required for this activity. Therefore, further action on water permits is not necessary at this time.

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5.2 Requirements

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5.2.1 Performance of this procedure must be authorized by an approved Task Order in accordance with EW-1016, "Waste Management Task Order Planning Process."

- 5.2.2 A review of the following, as applicable, should be conducted prior to performance of this procedure:
 - A. Precautions and Limitations, Section 6.0 of this procedure.
 - B. Material Safety Data Sheets (MSDS)
 - C. Material Evaluation Forms (MEF)
 - D. Reactivity Group Codes
 - E. Requirements of the job specific Task Order
- 5.2.3 Scales to be used shall have a current calibration sticker and have been checked in accordance with WM:EQOP-T-0006, "Checking Scale Operations."
- 5.2.4 Inspections of the forklift must be performed in accordance with RM-0021, "Safety Performance Requirements Manual," and SPR 7-10, "Forklift Operations."
- 5.2.5 Herculite must be taped to doors of ISO shipping containers (Sealands).
- 5.2.6 The roll-up door shall be covered to minimize opening as much as practicable.
- 5.2.7 A portable HEPA air filtration system shall be operating during packaging operation.
- 5.2.8 Equipment adjacent to the packaging operation shall be covered with suitable material.

6.0 PRECAUTIONS AND LIMITATIONS

- 6.1 Precautions
- 6.1.1 Appropriately-rated lifting equipment shall be used.
- 6.1.2 Proper lifting techniques shall be utilized.
- 6.1.3 When handling sharp objects or objects capable of producing splinters, leather palm gloves shall be worn.
- 6.2 Limitations
- 6.2.1 Personnel shall not lift in excess of weight limits.
- 6.2.2 A full TOC must **NOT** be lifted by the lid lifting handles. The lid lifting handles are designed to support the weight of the TOC lid only.